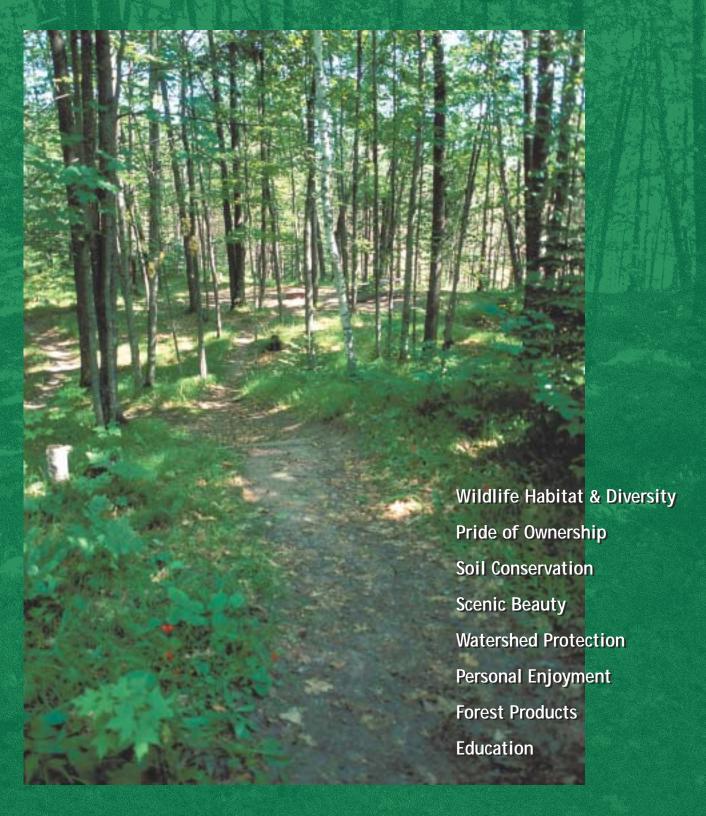
Multiple Benefits From Forest Management



The Forest

Consider a leisurely afternoon spent in your woodland. What characteristics of the forest are most important to you? The scenic beauty of the setting? The wildlife it attracts? The recreation it provides? The timber and firewood it supplies? Perhaps you feel grateful for the protection offered by your forest. Trees act as a windbreak from winter storms and noise buffers from traffic. They filter our water supply and protect our soil from erosion while improving air quality and providing habitat for wildlife. A forest is a renewable source of wood that builds our homes and pulp that makes our paper. It is all of these at once and still retains its beauty when managed properly.

Forests supply people with products we need to survive and others we desire to be more comfortable. Forests provide us with food, paper, lumber, firewood, recreation, clean water, sporting goods, wildlife habitat, scenic beauty, and much more. Without each of these, our life style would change greatly.

Fortunately, forests are renewable. Tree seedlings will flourish after each harvest and young trees will grow where older trees once stood, as long as the harvest is properly planned. The best way to maintain or conserve the health and productivity of forests is to manage them following a plan. Along with ensuring forest regeneration, a management plan can protect all of the pieces that make up a forest including the trees, soils, water, plants, wildlife, and natural beauty. Good planning and properly applied management techniques are the keys to meeting these objectives in a forest.

Good management begins with sound planning and the planning begins with you—the landowner—and your forester.

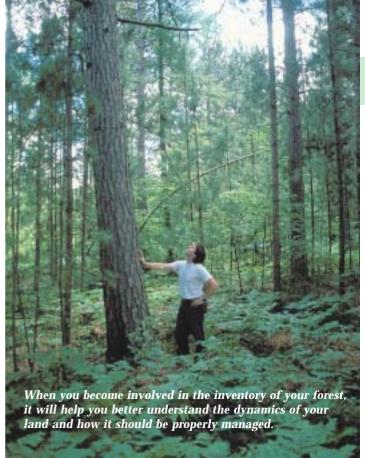


Photo by Robert Quee

Developing Your Forest Management Plan

A forest management plan is based on your goals and desires and includes actions to be taken to achieve these ends. The plan itself is a concrete document that landowners and foresters can refer to for guidance while a property is being managed.

The first step in creating a forest management plan is an initial inventory of your property. An inventory describes the soil and timber types, estimates the volume of trees and regeneration present, evaluates wildlife habitat, locates available access, and identifies historic, cultural, and natural resources that need to be protected. When completed it shows what you have and identifies opportunities as well as constraints.

Working with the completed inventory, a forester can analyze your land and blend their management recommendations into a balance between the present **condition** of the property, what it is **capable** of producing, and your **objectives** for it.

Your objectives will probably include some combination of the following. It is up to you and your forester to determine the combination that best suits you and your land.

Wildlife

Taking the time to manage for wildlife can be an incredibly rewarding activity. This consideration in your management plan can be very simple or quite complex depending on which animals you would like to have on your land and the condition of your forest. Either way, you can enjoy the opportunity to flush grouse or hear woodpeckers pounding on snags as you walk through your forest.

In order to attract an abundance of wildlife, a forest must have a diverse and plentiful supply of food and cover.

For many wildlife species, optimum food and cover can be found in forests that contain a wide range of tree species and sizes along with their associated shrubs and ground layer plants. Effective management works to maintain and enhance diversity within a forest.

Wildlife can be attracted to your forest merely by allowing a number of dead trees to remain standing. Snags provide den, nest, and feeding sites while acting as lookout towers and food storage bins. Downed trees that remain on the forest floor provide cover for salamanders, snakes, and



Planning for wildlife may create an abundance of wildlife viewing opportunities.

small mammals. As the log becomes hollow, they are transformed into stages for mating rituals as birds like the ruffed grouse perform drumming routines. Creating brush piles provides cover for small mammals like chipmunks, rabbits, and grouse. Additional feeding areas can also be established in open areas by planting clovers, grains, or other wildlife foods.

Many of the shrubs and trees that provide food for wildlife also produce colorful leaves, flowers, and fruits. Management which includes these species reaps both aesthetic and wildlife benefits.

Timber

The primary goal of timber management is to maintain a sustainable production of high quality timber products,

which will result in economic gain. However, this does not mean that other uses or objectives must suffer. Timber management operations can be designed to fulfill all of the goals identified in the management plan including wildlife management and aesthetics.

A landowner's fear of destroying their forest by harvesting trees is understandable but generally unfounded. All active, or



All thoughtful timber management practices are designed to keep the forest healthy and vigorous while ensuring that a new crop of trees will replace the old ones.

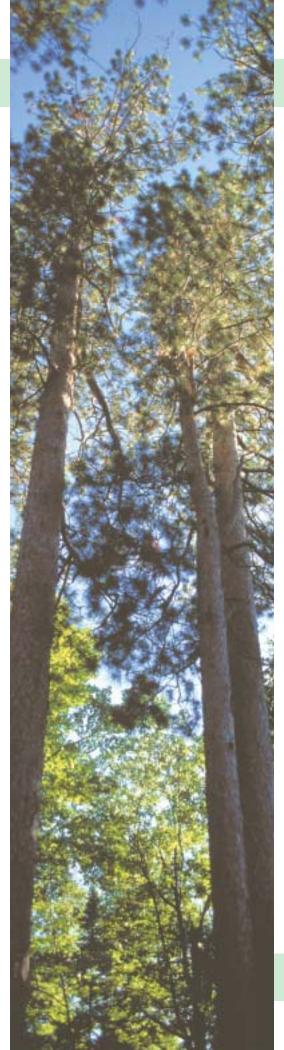
recently active, timber harvesting operations will appear messy and unattractive to the uninitiated eye, but this phase passes quickly as the forest responds to the management prescription. Well-managed timber harvests are designed to mimic natural disturbances such as windthrow and fire and ensure that young trees will grow to replace those that have been felled. A forester works to create a management plan that prescribes a harvest schedule to meet your objectives while maintaining or enhancing the health and vigor of your forest.

Some timber improvement practices are especially compatible with aesthetic improvement. Pruning produces knot-free timber while increasing visibility within a stand. Thinning weak, diseased, or poorly-formed trees from a stand allows the remaining healthy, well-formed trees to grow faster once they have more light and space.



Careful logging practices and good supervision of the harvest operation will help maintain aesthetics.

Photo by Ed and Helen Moberg



Aesthetics

Aesthetic considerations can be easily integrated into a management plan that includes timber harvesting and wildlife considerations. Special attention should be paid to the topography of the area and the trees that will remain standing, as well as areas that are visible from roadways, lakes, or streams. The remaining trees will directly affect the viewing corridors and variety within the stand. Specifications can be made with the logger concerning placement of roads and what amount of tree limbs and tops may be left behind.

A management plan that calls for the creation of large openings to favor sun-loving trees and specific wildlife can offer aesthetically pleasing viewing corridors over time. The clearing will appear more natural if the borders are curved and the shape is irregular. Leaving healthy, well-formed individual trees or scattered groups of trees within the harvested area can lessen the visual impact. Large diameter white pine, oak, and maple can benefit the area aesthetically while providing food and habitat for wildlife.

Plantations too can benefit visually from advanced planning. Greater scenic variety can be achieved by simply staggering the rows or alternating rows of different tree species. Also, laying out the rows in curved patterns rather than straight lines can create a more natural appearance.

A selective harvest of individual trees can be the easiest way to favor the characteristics found to be most desirable. Smaller trees can be removed to improve the visibility within the stand and create room for the remaining trees to grow. Forests dominated by one or two species can be thinned to give other species an opportunity to thrive thereby increasing the diversity within the stand. Small openings produced by removing groups of trees will create a mosaic of age classes within the forest.



The variety of sizes, species, and patterns created through forest management will change with the seasons and offer a kaleidoscope of colors and textures throughout the year.

An aesthetically-pleasing forest can become a retreat for people to escape to.

Photo by Robert Queen

Watershed Protection

A forest with its trees, plant cover, forest litter, and organic matter functions like a giant filtering system. Water is collected from rain and snowfall and stored in the ground or slowly percolates into lakes and streams. Some of the stored water is taken up by the plants and trees to be used or transpired back into the air.

The water-holding capacity of the forest is extremely important as it determines the quality and quantity of the waters released to nearby lakes, streams, and drinking water supplies. A diversity of tree age classes in a watershed results in different melting rates for snow, thus reducing erosion from spring melts.

Forest management practices that minimize soil disturbances and prevent debris from washing into water bodies while keeping the forest in a healthy growing condition are the best means of protecting a forest watershed.

Healthy forests protect our water resources. Planned management keeps our forests healthy.

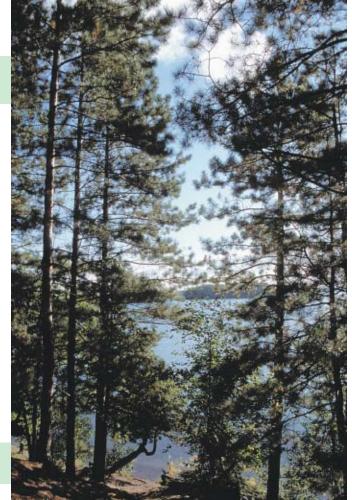


Photo by Robert Queen

Hands On Activities of the Landowner

Part of the beauty of having a woodland is known only by those who work their own land. There are many activities a landowner can carry out to help improve the health and vigor of a forest without needing expensive machinery or outside help. Some hands-on activities that may be applicable to your lands are:



- Planting trees and shrubs for erosion control, wildlife habitat, aesthetic improvements, and future timber production.
- Controlling invasive species that are present in your woodland.
- Cutting firewood for home-use or commercial sale.
- Pruning to increase production of high quality lumber.
- Pruning or shearing to obtain well-shaped Christmas trees.
- Cutting evergreen boughs to make wreaths.
- Tapping sugar maple for maple sap production.
- Monitoring your woodland to assess its overall health.
 Regular walks through your woodland can tune you in to the beginnings of an insect or disease outbreak.

There are many activities you can carry out to improve the health and vigor of your forest.

Summary

A planned and managed forest can retain its natural beauty while producing a sustainable supply of lumber, fiber, wildlife, recreation, and clean water. Managing one aspect of the resource does not eliminate the possibility of developing others if each is planned in consideration of the others.

A professional forester can help you inventory, analyze, and evaluate the potentials of your forest. You can then decide what your opportunities are and what you want from your forest. The forester can then help prepare a management plan, which includes those practices most feasible in helping you achieve your objectives while still protecting and improving your forest land. Use the expert knowledge of the trained individual. You will find that these people will appreciate the opportunity to share with you in exploring the complexities of the forest community and how, through wise use, it can yield the variety of things you may envision for it.

You can take the first step in establishing and meeting your objectives by developing a management plan with the help of a professional. Contact a forester in your area. Taking the initiative is up to you—the landowner.



Harvesting timber can be a management decision that is compatible with many other objectives.

Photo by Robert Queen



Photo by Robert Queen

Professional Assistance

Forestry guidance is available to Wisconsin landowners through a network of public and private sources. Local DNR foresters serving each county and private Cooperating Foresters are listed in the Directory of Foresters, available from your local DNR Service Center or:

Wisconsin Department of Natural Resources Division of Forestry 101 South Webster St., P.O. Box 7921 Madison, WI 53707-7921 (608) 267-7494

Additional information is available from groups such as the Wisconsin Woodland Owners Association, the Wisconsin Tree Farm Committee, Wisconsin Family Forest chapters, and local wood cooperatives and landowner associations. Contact your local DNR Service Center, University of Wisconsin Extension office, or local Land Conservation Department to learn more. Or check out our web site and look for "Private Forestry":

www.dnr.state.wi.us



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